II. CLAIM AMENDMENTS

1. (Currently Amended) A method of using mobility agents in a telecommunications system, which telecommunications system comprises at least one mobile node supporting the mobile IP and several network elements, of which network elements at least one comprises one or more mobility agents configured to transmit advertising messages to mobile nodes, the method comprising ~~the steps of~~:

transmitting information on the attributes of one or more foreign agents ~~network elements~~ in advertising messages from the mobility agents to at least one mobile node, said information comprising at least one of the following foreign agent attributes: current delay of a connection offered by the foreign agent, average delay of the connection offered by the foreign agent, jitter of the connection offered by the foreign agent, number of users served by the foreign agent, throughput of the foreign agent, load of the foreign agent, proportional load of the foreign agent compared to the other foreign agents in the system, and

using said information in the mobile node in the selection of a serving foreign agent~~network element~~.

2. (Currently Amended) A method according to claim 1, wherein:

said information is transmitted in advertising messages including care-of addresses of the mobility agents periodically, ~~and/or~~ at the request of a mobile node, or periodically and at the request of a mobile node.

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) A method according to claim 1, wherein the mobile node is wireless and the telecommunications system is wireless and comprises access points which offer a wireless connection to at least one mobile node, said information in advertising messages further comprising at least one of the following:

loads of different access points,

information on the least loaded access point,

information on the recommended access point, and

other quality of service parameters of the access points.

6. (Currently Amended) A method according to claim 5, wherein:

the attributes of different access points are compared in the mobile node on the basis of said information,

the access point that on the basis of its attributes and any other criteria, ~~such as radio channel measurements~~, can ~~best~~ offer a telecommunications connection to the mobile node is selected, and

a connection is established between the selected access point and the mobile node.

7. (Currently Amended) A method of utilizing advertising messages in a telecommunications system, which telecommunications system comprises at least one mobile node and at least one router, the router being configured to transmit advertising messages to mobile nodes, the method comprising ~~the steps of~~:

transmitting advertising messages from at least one router to at least one mobile node, the messages including information on the attributes of one or more ~~network elements~~routers, said information comprising at least one of the following router attributes: current delay of a connection offered by the router, average delay of the connection, jitter of the connection, number of users served, throughput, load, proportional load compared to the other routers in the system, and

using said information in the mobile node in ~~the~~ selection of a serving ~~network element~~ router.

8. (Cancelled)

9. (Currently Amended) A method according to claim 7, wherein the mobile node is wireless and the telecommunications system is wireless and comprises access points which offer a wireless connection to at least one mobile node, said information in advertising messages further comprising at least one of the following:

loads of different access points,

information on the least loaded access point,

information on the recommended access point, and

other quality of service parameters of the access points.

10. (Currently Amended) A method according to claim 9, wherein

the attributes of different access points are compared in the mobile node on the basis of said information,

the access point that on the basis of its attributes and any other criteria, ~~such as radio channel measurements~~, can ~~best~~

offer a telecommunications connection to the mobile node is selected, and

a connection between the selected access point and the mobile node is established.

11. (Currently Amended) A network element of a telecommunications system, the network element comprising:

an IP mobility agent functionality configured to transmit advertising messages to mobile nodes in the system,

means for collecting information on the attributes of one or more ~~network elements~~ foreign agents in the telecommunications system, said information comprising at least one of the following foreign agent attributes: current delay of a connection offered by the foreign agent, average delay of the connection offered by the foreign agent, jitter of the connection offered by the foreign agent, number of users served by the foreign agent, throughput of the foreign agent, load of the foreign agent, proportional load of the foreign agent compared to the other foreign agents in the system, and

means for transmitting the information in advertising messages to at least one mobile node.

12. (Currently Amended) A network element according to claim 11, wherein the ~~wherein the~~ information in advertising messages further comprises ~~attributes of a foreign agent and/or~~ attributes of one or more access points of the telecommunications system.

13. (Currently Amended) A router configured to transmit advertising messages to mobile nodes, the router comprising:

means for collecting information on the attributes of one or more ~~network elements~~ routers of the telecommunications system, said information comprising at least one of the following router attributes: current delay of a connection offered by the router, average delay of the connection, jitter of the connection, number of users served, throughput, load, proportional load compared to the other routers in the system, and

means for transmitting the information in advertising messages to at least one mobile node.

14. (Currently Amended) A router according to claim 13, ~~whereinthe~~ wherein the information in advertising messages further comprises attributes ~~of the router and/or attributes of~~ one or more access points of the telecommunications system.

15. (Currently Amended) A mobile node supporting the mobile IP for a telecommunications system, which telecommunications system comprises several network elements, of which at least one

comprises one or more mobility agents, said mobile node comprising:

reception means for receiving attribute information on one or more ~~network elements~~ foreign agents from one or more mobility agents, said information comprising at least one of the following foreign agent attributes: current delay of a connection offered by the foreign agent, average delay of the connection offered by the foreign agent, jitter of the connection offered by the foreign agent, number of users served by the foreign agent, throughput of the foreign agent, load of the foreign agent, proportional load of the foreign agent compared to the other foreign agents in the system, and

processing means for selecting ~~the~~ a serving ~~network element~~ foreign agent on the basis of said information.

16. (Currently Amended) A mobile node according to claim 15, wherein:

~~said attribute information comprises attributes of the foreign agents,~~

the processing means are configured to compare attributes of the foreign agents of the basis of said information,

the processing means are configured to select ~~the~~ a foreign agent that on the basis of its attributes can ~~best~~ take care of data transmission of the mobile node, and

the processing means are configured to transmit a registration request to the selected foreign agent.

17. (Currently Amended) A mobile node according to claim 15, wherein:

said information in advertising messages further comprise attributes of the access points of the telecommunications system,

the processing means are configured to compare the attributes of the access points on the basis of said information received from the mobility agents,

the processing means are configured to select the access point that on the basis of its attributes and any other criteria, ~~such as radio channel measurement~~, can ~~best~~ offer a telecommunication connection to the mobile node, and

the processing means are configured to establish a connection between the selected access point and the mobile node.

18. (Cancelled)

19. (New) A mobile node for a telecommunications system, which telecommunications system comprises one or more routers configured to transmit advertising messages, said mobile node comprising:

reception means for receiving attribute information on one or more routers from one or more routers, said information comprising at least one of the following router attributes: current delay of a connection offered by the router, average delay of the connection, jitter of the connection, number of users served, throughput, load, proportional load compared to the other routers in the system, and

processing means for selecting a serving router on the basis of said information.

20. (New) A mobile node according to claim 19, wherein said information in advertising messages further comprises attributes of the access points of the telecommunications system,

the processing means are configured to compare the attributes of the access points on the basis of said information,

the processing means are configured to select an access point that on the basis of its attributes and any other criteria, such as radio channel measurement, can offer a telecommunication connection to the mobile node, and

the processing means are configured to establish a connection between the selected access point and the mobile node.

21. (New) A method according to claim 6, wherein said other criteria comprises radio channel measurements.

22. (New) A method according to claim 10, wherein said other criteria comprise radio channel measurements.

23. (New) A mobile node according to claim 17, wherein said other criteria comprise radio channel measurements.